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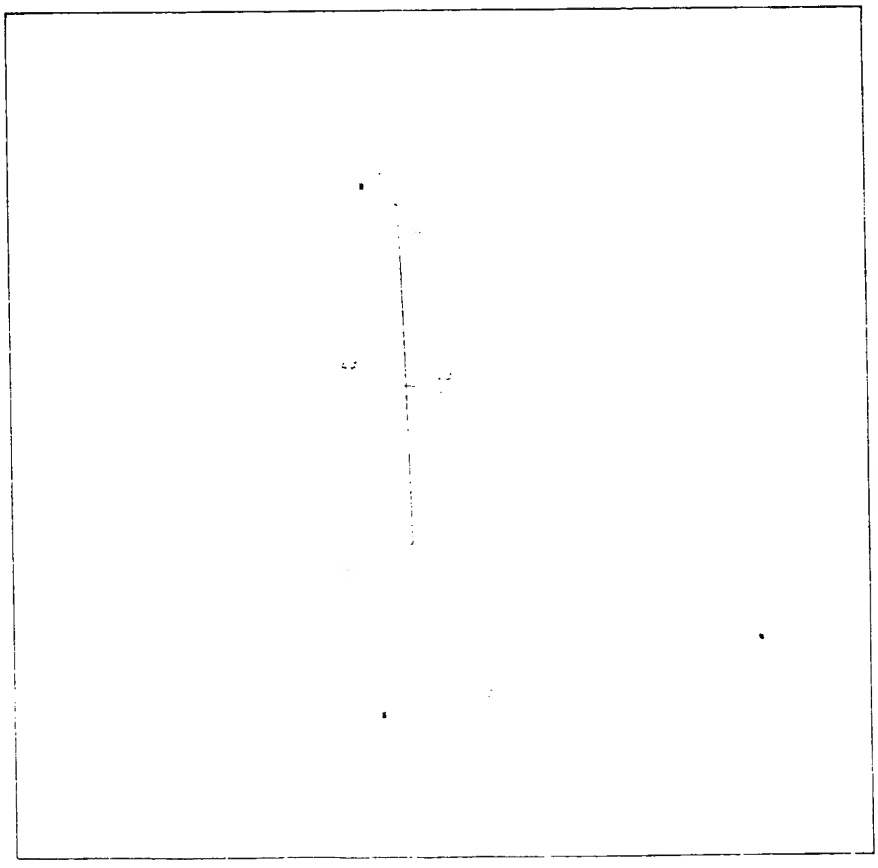
(54) Ice lolly precursor

(57) The invention provides for the storage and supply of ice-lollies without the need for constant refrigeration.

A liquid is enclosed within an impervious container e.g. a blister pack which also embraces a handle which, in one orientation of the container is partly but not completely immersed in the liquid. Provided that the container is refrigerated for a sufficient period immediately before the lolly is to be consumed for freezing to occur, pre-use storage and transport may be in non-refrigerated conditions.



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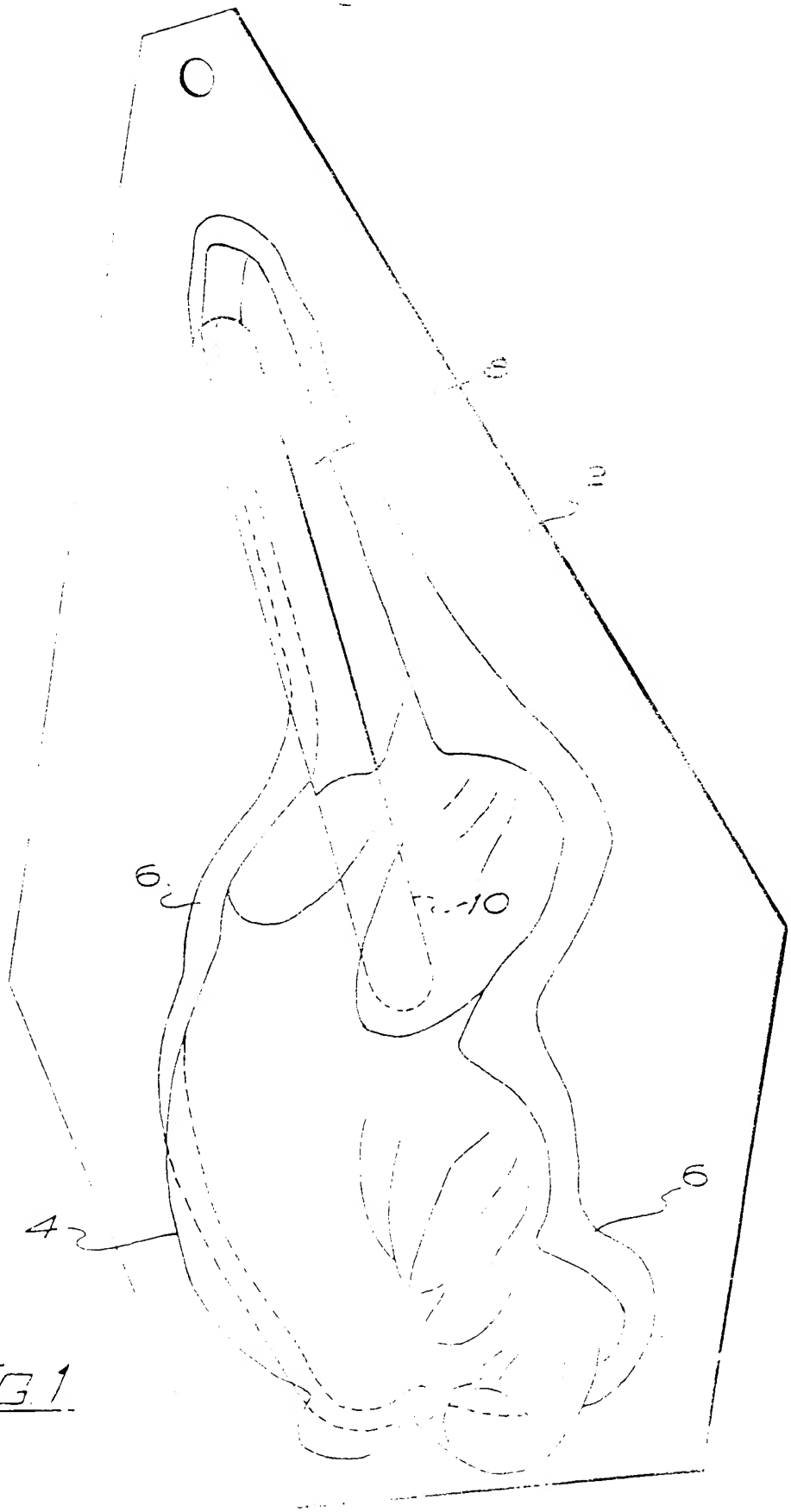

FIG. 1

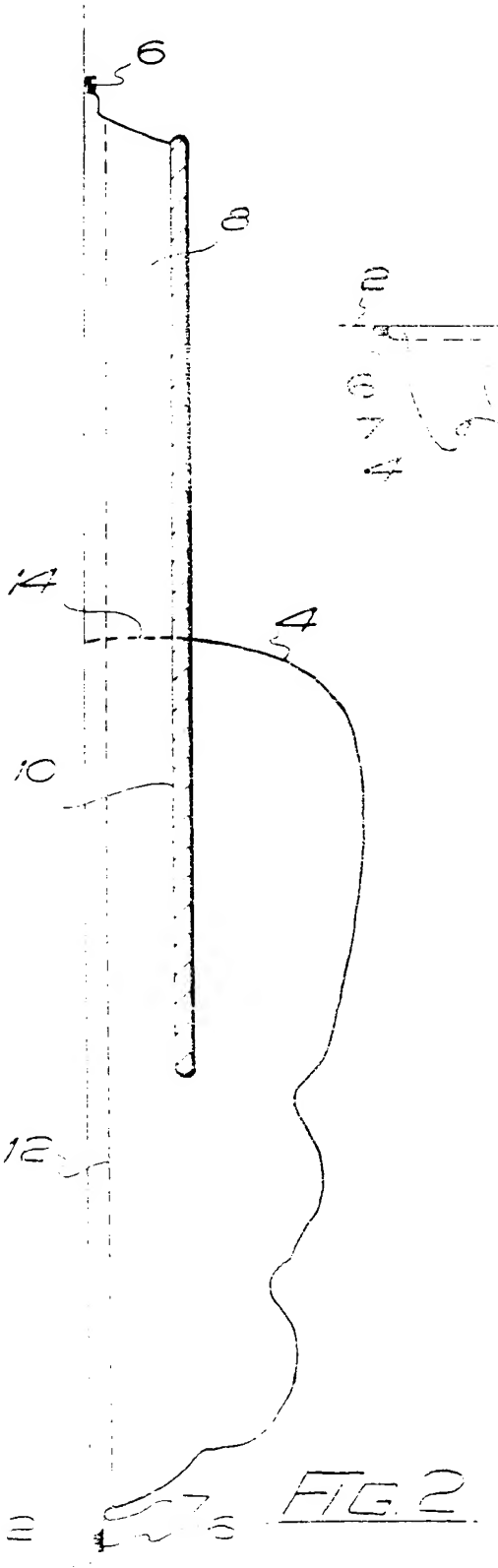

FIG. 2

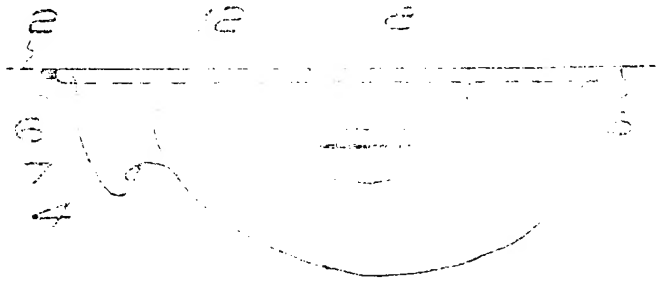

FIG. 3

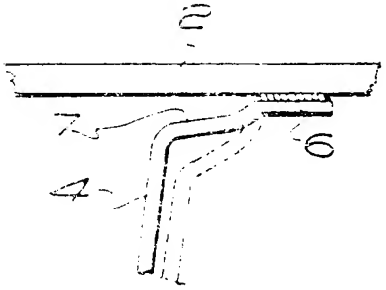

FIG. 4

SPECIFICATION

Ice lolly precursor

The invention relates to an article for use in making a frozen confection of a type commonly known as an ice lolly.

In the process for manufacturing ice lollies employed hitherto, a quantity of water based liquid is frozen in a mould and having been withdrawn from the mould is enclosed in a bag and distributed and vendered in and from a refrigerated container. The maintenance of freezing conditions in such a container is however expensive and the number of ice lollies that can be handled is limited by the volume of refrigerated storage space available. It is an object of the invention to obviate the above-mentioned disadvantages.

According to the invention there is provided a precursor for an ice lolly comprising a container containing a liquid which can be solidifiedin the container to a comestible solid. The precursor may also comprise a handle which in at least one orientation of the container, is partly but not completely immersed in the liquid. Preferably the handle is totally enclosed within the container and it may be releasably supported by the container.

Alternatively, the container may be adapted so that part of a handle may be introduced into it and immersed in the liquid.

In a further alternative, the shape of the container is such that the comestible solid formed by solidifying the liquid contained therein will be adapted to be secured to a handle.

Preferably the container is a blister pack comprising a shallow dish secured about its rim to a flat sheet so as totally to enclose the liquid. The blister pack may be vacuum formed from a sheet of thermoplastics material and the flat sheet may be an impervious sheet of foil, cardboard or plastics material or a combination of cardboard and plastics material.

The liquid is preferably water-based and may contain gelatin.

Embodiments of the invention will now be described by way of example and with reference to the accompanying drawings, of which:–

Fig. 1 shows an ice lolly precursor in perspective.

Fig. 2 shows the article of Fig. 1 in longitudinal section;

Fig. 3 shows the embodiment of Fig. 1 in transverse section; and

Fig. 4 shows a detail of the view shown in Fig. 3.

As shown in the figures a pack for an ice lolly precursor comprises a flat card 2 to which a blister dish 4 is secured by means of its flanged rim 6. The blister dish is provided at one end with a tongue-like extension 8 which corresponds in width approximately to that of a stick 10 which acts as a handle for the ice lolly.

As shown particularly in Fig. 2 the stick 10 is supported parallel to but spaced from the board 2 and extends throughout the length of the extension 8 and projects into the space defined by the main body of the blister dish 4. The dish 4 is formed of thermoplastics sheet material and as shown particularly in Figs. 2 and 3 the extension 8 fits closely around the longitudinal edges and one end of the stick, and the resilience of the sheet material allows the stick to be snapped into and out of the location shown in the figures.

In the manufacture of the ice lolly precursor a blister dish is vacuum formed from a sheet of thermoplastics material and separated from the sheet and supported with the rim 6 uppermost and horizontal. In this orientation the blister dish is filled to approximately the level 12 with an aqueous liquid which will freeze to an edible solid. The board 2 is then applied to the rim 6 and sealed thereto by heating the board which has a film of heat-sensitive adhesive thereon, in a manner known in the manufacture of blister packs.

In order to allow for the expansion both of the air above the liquid by the heat of the sealing operation, and of the liquid during freezing, the whole circumference of the rim 6 is formed with an offset portion 7, shown in detail in Fig. 4. When the contents of the pack expand, the pack distorts in the region of the offset portion 7 as shown in dotted lines in the Figure so that the enclosed volume increases, and this diminishes the possibility of leakage due to increased pressure.

The spacing of the upper surface of the liquid from the rim 6 and thus from the board 2 has two advantages, firstly in that the liquid is to some extent isolated from the heat which seals the board to the rim and secondly, when the filled pack is reoriented with the board 2 vertical the liquid contained in the space between the stick 10 and the board 2 in the extension portion 8 drains down into the main body of the dish 4, and ideally the liquid level in this orientation is as shown by dotted line 14.

The board 2 and the blister dish 4 are impervious to liquid and the filled and sealed pack is now capable of storage and distribution without the need for refrigeration, always provided that the liquid itself does not deteriorate. Refrigeration is, in fact, necessary only immediately before the pack is opened, and the ice lolly precursor as described can be vended in two main ways.

Firstly, as exemplified by vending from an ice cream van or recreational area kiosk, the articles are stored in a refrigerated container with the board 2 upright and the extension 8 uppermost. Provided that the articles are refrigerated immediately prior to sale for a period sufficient to freeze the liquid, the article sold will consist of a frozen block of shape corresponding to that of the main portion of the blister 4 and terminating at line 14 and having a stick 10 embedded in it and projecting from it. The board 2 is separated from the blister dish by the customer, the stick is pushed out of the extension 8 and the frozen block will separate from the dish ready for consumption. The board 2 and the dish 4 are disposable.

In an alternative method of vending, for example by a supermarket, the filled packs are stored otherwise than in refrigerated containers and in any convenient orientation. The purchaser will be advised to place the pack in a refrigerator or freezer with the board 2 upright and the extension 8 uppermost for an appropriate period to allow the contents of the pack to freeze before the pack is opened for the consumption of the contents.

It will be realised that limiting the requirement for refrigeration to the period immediately before consumption eliminates the disadvantages referred to hitherto in that the distribution and much of the storage may be in unrefrigerated containers, and even in the domestic situation only such numbers of the articles as are expected to be immediately required for consumption need to the stored in the refrigerator, whilst a further stock can be kept in any cupboard.

In another embodiment particularly suited to the alternative method of vending, the container does not enclose a handle but is provided with a seal through which, with the contents in liquid state, a portion of a handle may be introduced by the consumer so as to be immersed in the liquid prior to freezing. The container may conveniently releasably hold such a handle externally thereof.

The stick or handle may be of wood or plastics or other suitable material. It may be round or flat and may be shaped so as to lock in the solid. Thus the portion of a flat handle to be embedded in the solid may bt perforated.

In yet a further embodiment not shown, the container may be of such an internal shape that the solid, conforming to said shape has a recess or a projection or is otherwise adapted to be secured to a handle after release from the container.

Whilst reference has been made to the blister dish being closed by a card or board, it may alternatively be closed by flexible sheet material, such as foil or thin plastics material, which may be applied to the dish from a roll. The foil or thin sheet material may be such as may be broken to release the frozen solid. In such construction the rim 6 of the dish may be not of regular width as shown in the figures, but may extend to terminate in a regular, for example rectangular configuration, irrespective of the shape of the dish.

The aqueous liquid, which in all embodiments may contain permitted colourings, flavours and preservatives may, in a modification of the invention as hitherto described, also contain such a proportion of gelatin that, at room temperature, the composition turns to jelly. Upon refrigeration the composition still freezes to an icy form, but the gelatin content improves the texture. Moreover, if the pack is held in the handle-uppermost orientation until the contants turn to jelly, the pack can subsequently be packed in any orientation – even during refrigeration – provided that the jelly has not in the meantime been allowed to melt. The addition of gelatin also reduces the risk of spillage in case of leaks in the seal, and reduces the possibility of discoloration of the stick by the liquid.

The major portion of the blister dish 4 is formed in a shape attractive to the would-be consumer, and the board or foil 2 may be printed with advertising matter and possibly instructions particularly as to the length of freezing time required before opening the pack.

CLAIMS

1. A precursor for an ice lolly comprising a container containing a liquid which can be solidified in the container to a comestible solid.

2. A precursor according to Claim 1 further comprising a handle which, in at least one orientation of the container is partly but not completely immersed in the liquid.

3. A precursor according to Claim 2 wherein the handle is totally enclosed within the container.

4. A precursor according to Claim 1 wherein the container is adapted so that part of a handle may be introduced into it and immersed in the liquid.

5. A precursor according to Claim 2, 3 or 4 wherein the handle is releasably supported by the container.

6. A precursor according to any one of Claims 2 to 5 wherein the handle is shaped to lock in the solid.

7. A precursor according to Claim 1 wherein the internal shape of the container is such that the solid will be adapted to be secured to a handle.

8. A precursor according to any one of the preceding claims wherein the container comprises a blister pack comprising a shallow dish secured about its rim to a flat sheet so as totally to enclose the liquid.

9. A precursor according to Claim 8 wherein the blister pack is vacuum formed from plastics material.

10. A precursor according to Claim 8 or Claim 9 wherein the flat sheet can be separated from the pack to release the solid.

11. A precursor according to Claim 8 or Claim 9 wherein the flat sheet can be ruptured to release the solid.

12. A precursor according to any one of the preceding claims wherein the liquid contains gelatin.

13. A precursor for an ice lolly substantially as described with reference to the drawings.

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